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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,834	11/12/2003	Jacques Dov Barth	P1552	9516
27612	7590	01/11/2006	EXAMINER	
AVERILL & VARN 8244 PAINTER AVE. WHITTIER, CA 90602			JAWORSKI, FRANCIS J	
			ART UNIT	PAPER NUMBER
			3737	

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/712,834

Applicant(s)

BARTH ET AL

Examiner

Jaworski Francis J.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9, 17, 19 and 21 - 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 17 and 21 - 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 – 9, 17 and 21 – 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fritz et al (US6817982) in view of Fritz et al (US6835177), alone or further in view of Fan et al (US2004/0197015).

Fritz et al '982 col. 6 lines 22 – 43 and in the pre-work and algorithm sequences of cols. 6 – 12 teaches carotid regional IMT measurement determination on the far arterial wall by the identification of vertical light and dark band or segment areas tantamount to striping expanded about an initial center point by comparison of such

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bands between pixel columns to measure the far artery wall IMT below the CCA bifurcation . with note in col. 13 lines 17 – 26 and claim 4 that the IMT must be compensated in relation to distance from the bifurcation or otherwise operator-corrected but does not appear to expand upon this concept. However the later Fritz et al '177 in Figs. 27 – 29 uses vertical slices to track stripes for carotid size identification and specifying the CCA dilation (bulb/bifurcation region) based on the order and sizing of the stripes with instruction to place the measurement region in relation thereto, and a specific region of interest is identified in order to noise process the region for the measurement, see col. 11 line 50. One may proceed from the Fritz et al data to position a region by centimeter measurements in relation to the anatomy to encompass the far carotid wall below the bifurcation so that the wall thickness measurement is not skewed by the normal anatomy closer to the bulb. In the alternative, it would have been further obvious in view of Fan et al para [0029, 0035, 0038, and 0052-0055] to pursue the measurement region as a vertical line set since the longitudinal carotid view is not a closed contour such that this defines the overall measurement format.

***Allowable Subject Matter***

Claim 19 is allowed.

### **Response to Arguments**

The Fritz et al patents have mooted previous arguments to the extent that the technique therein is based upon column pixel intensity bright-dark transitions and identifies valid measurement relationships to the CCA far wall location below the dilatation such that together or with the Fan et al disclosure the selection of a region of interest for IMT measurement based upon slice striping and bifurcation relationship would

This action is NOT made final however the case should be prepared for final action.

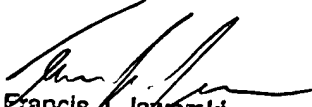
The following additional art is cited soas to complete the record: Cao et al (US20050038343) is cited for Doppler-based bifurcation identification for CIMT measurement, see paras [0017, 0036].

Fritz et al (US20050096528) is cited to represent the state of the CIMT analyzer system art as is Sokulin et al (US20050267365) element 72 and Figs. 4A,B.

Any inquiry concerning this communication should be directed to Jaworski Francis J. at telephone number 571-272-4738.

FJJ:fjj

01082007

  
Francis J. Jaworski  
Primary Examiner